

In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1.-177. (Cancelled)

178. (New) A method for analyzing a nucleic acid comprising
providing a nucleic acid, labeled with a unit specific marker,
detecting a fluorescent signal from the unit specific marker bound to the nucleic acid after
exposure to electromagnetic radiation,
storing a signature of signals to analyze the nucleic acid,
wherein the nucleic acid is moved relative to the electromagnetic radiation by a
polymerase, and the unit specific marker is labeled with a fluorophore that emits the fluorescent
signal in the absence of fluorescence resonance energy transfer.

179. (New) A method for identifying a unit specific marker bound to a nucleic acid
comprising
moving a nucleic acid past electromagnetic radiation using a polymerase,
exposing a labeled unit specific marker bound to the nucleic acid to the electromagnetic
radiation, and
detecting an electromagnetic radiation signal from the labeled unit specific marker in the
absence of fluorescence resonance energy transfer.

180. (New) The method of claim 178, wherein the electromagnetic radiation is transported
through a waveguide.

181. (New) The method of claim 179, wherein the electromagnetic radiation is transported
through a waveguide.